

Time series of silicoflagellates and ebridians in the eastern Mediterranean and Black Seas

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Silicoflagellates and ebridians represent a minor component of siliceous plankton in the oceans but are known to be very sensitive to environmental factors that control species' distribution and the occurrence of peculiar morphological characters.

Here, we show the seasonal and interannual variability in abundance and assemblage composition of silicoflagellates and ebridians. Samples were collected from monthly water sampling in the Gulf of Trieste (northern Adriatic Sea, L-TER C1 stations 45°42'2"N, 13°42'36"E, from May 2011 to February 2013) and fluxes from sediment traps at a mooring station offshore Crete (35°30'N, 23°40'E from June 2005 to May 2006; Malinverno *et al.*, 2009), a mooring station in the pelagic Ionian Sea (35°13'N, 21°30'E from September 1999 to May 2000), and a mooring station in the Black Sea (42° 58'00"N, 29°29'00"E from October 2007 to September 2008; (Triantaphyllou *et al.*, 2014)).

Among silicoflagellates, *Dictyocha stapedia* Haeckel 1887 is the most abundant species in both coastal (Gulf of Trieste, off Crete) and pelagic (Ionian Sea) settings, followed by *D. aculeata* (Lemmermann) Dumitrica 1973, where *Stephanocha speculum* (Ehrenberg) McCartney and Jordan 2015 is rare. The latter is, in contrast, the dominant species in the Black Sea throughout the year. *Octactis pulchra* Schiller 1925 is seasonally abundant in the coastal North Adriatic and in the Black Sea but is absent from the Ionian Sea. Ebridians are absent from the pelagic Ionian

Sea but are seasonally significant in the coastal northern Adriatic and in the Black Sea, with *Ebria tripartita* showing its maxima in winter-spring and *Hermesinum adriaticum* in summer.

Observations and preliminary morphometric analyses revealed a wide size spectrum for *D. stapedia* and significant variations in the morphological characters of *S. speculum*, as already observed in populations from the northern Aegean Sea under the influence of low-salinity Black Sea water (Malinverno *et al.*, 2016).

References

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